

WHAT IS CLAIMED IS:

Seu
1 1. A method of securing a data transaction across a security barrier, the method
2 comprising:

3 validating a request message against a predefined request message specification;
4 transmitting the validated request message across the security barrier;
5 validating a response message against a predefined response message
6 specification, the response message corresponding to the validated
7 request; and
8 transmitting the validated response message across the security barrier.

1 1 2. A method as in claim 1,

2 wherein the request and response message specifications are predefined in
3 accordance with valid request and response message constraints specific to
4 an information resource.

1 1 2 3. A method as in claim 1,

2 wherein at least one of the request and response message specifications is
3 cryptographically secured.

1 1 2 3 4. A method as in claim 1, further comprising:

2 receiving, at an application proxy, an access request targeting an information
3 resource;

4 formatting the request message in a structured language corresponding to the
5 request message specification; and

6 transmitting the formatted request message to a secure data broker for the request
7 message validating.

1 1 2 3 4 5. A method as in claim 1, further comprising:

2 formatting the response message in a structured language corresponding to the
3 response message specification; and

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transmitting the formatted response message to a secure data broker for the
response message validating.

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6. A method as in claim 1, further comprising:
accessing an information resource in accordance with the validated request
message; and
preparing the response message in accordance with the access.

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7. A method as in claim 6,
wherein the response message is formatted in a structured language corresponding
to the response message specification.

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8. A method as in claim 1,
wherein the request message is formatted in a structured language corresponding
to the request message specification; and
wherein the response message is formatted in a structured language corresponding
to the response message specification.

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9. A method as in claim 8,
wherein the structured languages corresponding to the request and response
message specifications include an eXtensible Markup Language (XML).

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10. A method as in claim 1,
wherein the request and the response message validatings are respectively
performed at first and second secure data brokers on opposing sides of the
security barrier; and
wherein the validated request and response message transmissions are between
the first and second secure data brokers.

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11. A method as in claim 1, wherein the request message validating includes:

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supplying the formatted access request to a first intermediary, the intermediary validating the formatted access request in accordance with the request message specification; and
forwarding the validated access request across the security barrier.

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3 predefining a response message specification corresponding to a structured
4 response language;
5 formatting a response to an access request targeting the information resource, the
6 formatted response being in accordance with the structured response
7 language;
8 supplying the formatted response to an intermediary, the intermediary validating
9 the formatted response in accordance with the response message
10 specification; and
11 forwarding a validated response across the security barrier.

1 23. A method as in claim 22, further comprising:
2 accessing the information resource in accordance with the access request from a
3 client;
4 supplying the client with a response in accordance with the validated response.

1 24. An information security system comprising:
2 a security barrier;
3 a proxy for an information resource, the proxy and the information resource on
4 opposing first and second sides, respectively, of the security barrier;
5 a data broker on the first side of the security barrier, wherein, in response to an
6 access request targeting the information resource, the data broker validates
7 a request message against a predefined request message specification and
8 forwards only validated request messages across the security barrier.

1 25. An information security system as in claim 24, further comprising:
2 a second data broker on the second side of the security barrier, wherein, in
3 response to an access targeting the information resource, the second data
4 broker validates a response message against a predefined response
5 message specification and forwards only validated response messages
6 across the security barrier.

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the access requests across the security barrier toward the information resource; and

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the parser code including instructions executable as a first instance thereof to validate the received access requests against the predefined request message specification.

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31. The computer program product of claim 30, further comprising:
an encoding of the predefined request message specification.

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32. The computer program product of claim 30,
wherein the data broker code and parser code are also executable on a second
network server separated from a client application by the security barrier;
wherein the data broker code includes instructions executable as a second instance
thereof to receive responses in a structured language corresponding to a
predefined response message specification and to forward validated ones
of the responses across the security barrier toward the client application;
and

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wherein the parser code includes instructions executable as a second instance
thereof to validate the received responses against the predefined response
message specification.

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CW/H

B2

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- 4 communications medium.